

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A method of optimizing the synchronization of data between a client computer having a client database and a server computer having a server database, comprising:

receiving a plurality of data objects from the client computer;
determining if a received data object is improperly received, wherein the determination of an improperly received data object is based upon the detection of a data transfer error; and

selectively transmitting a child object from the client computer to the server computer, only if no data transfer error was detected with respect to the a parent object associated with the child object.

2. A method of optimizing the synchronization of data between a client computer having a client database and a server computer having a server database, wherein each database comprises a plurality of data objects arranged in an object hierarchy comprising at least one parent object and at least one associated child object, comprising:

receiving at the server computer a data object transferred from the client computer;

assigning a status code to the data object received at the server computer, the status code being based upon the detection or non-detection of a data transfer error;

transmitting the status code assigned to the data object to the client computer, thereby updating the data object in the client database;

updating a status code of child objects associated with the updated data object in the client database, the updated status code of the child objects being based on the status code of the updated data object; and

selectively transmitting child objects from the client computer to the server computer, the selection being based on the status code of the child objects.

3. The method of Claim 2, wherein the status code is assigned by the server computer.

4. The method of Claim 2, further comprising:
assigning a server ID to the data object received at the server computer if no transfer error was detected; and
transmitting the server ID assigned to the data object to the client computer.

5. The method of Claim 4 wherein the status code and the server ID are assigned by the server computer.

6. The method of Claim 4, further comprising updating a server ID of child objects associated with the updated data object, the updated server ID of the child objects being based on the server ID of the updated data object; and wherein the selective transmission of child objects to the server computer is also based on the server ID of the child objects.

7. The method of Claim 2, further comprising, transmitting at least one new data object to the client computer, a server ID being assigned to said at least one new data object.

8. The method of Claim 7, wherein the new data objects include a server ID assigned by the server computer.

9. The method of Claim 2, wherein the object hierarchy further comprises at least one grandchild object associated with the at least one child object and the at least one parent object, the method further comprising:

updating a status code of grandchild objects associated with child objects associated with the updated data object, the updated status code of the grandchild objects being based on the status code of the updated data object; and

selectively transmitting grandchild objects from the client computer to the server computer, the selection being based on the status code of the grandchild objects.

10. The method of Claim 9 wherein the status code is assigned by the server computer.

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16. A computer-readable medium containing computer-readable instructions which, when executed by a computer, perform the method of any one of Claims 13-15.

18. A method of optimizing the transfer of data stored in a client computer database and to a server computer for storage in a server computer database, wherein each database comprises a plurality of data objects arranged in an object hierarchy comprising at least one parent object and at least one associated child object, comprising:

19. The method of Claim 18, further comprising:
assigning a server ID to the received data object; and
transmitting the server ID assigned to the data object from the server computer to
the client computer.

20. The method of Claim 18, further comprising, transmitting at least one of new objects from the server computer to the client computer, a server ID being assigned to said at least one new objects.

21. A computer-readable medium containing computer-readable instructions which, when executed by a computer, perform the method of any one of Claims 18-20.

22. A computer-controlled apparatus for performing the method of any one of Claims 18-20.